



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,748	11/12/2003	Steven L. Flickinger	17511 C	7557

7590 12/16/2004

The Whitaker Corporation
Suite 140
4550 New Linden Hill Road
Wilmington, DE 19808

EXAMINER

DINH, PHUONG K

ART UNIT	PAPER NUMBER
----------	--------------

2839

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

22

Office Action Summary	Application No. 10/706,748	Applicant(s) FLICKINGER ET AL.	
	Examiner Phuong KT Dinh	Art Unit 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-25 is/are allowed.
- 6) ☒ Claim(s) 26-31 and 34-43 is/are rejected.
- 7) ☒ Claim(s) 32 and 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 26-31 and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (U. S. Patent 4,352,492) in view of Hall (U. S. Patent 4,388,671).

Regarding claim 26, Smith (see figures 9-11) discloses module for electrically connecting to a mating connector mounted to a host circuit board the module comprising: a housing (see the attachment of figures 10 ad 11) having a front and back orientation and a top and bottom orientation, said housing having a top wall, a bottom wall, a back wall and side walls, each of said top wall, said bottom wall, and said side walls being planar; a planar module circuit board 66 having pads suitable for forming an electrical connection with contacts of the mating connector, said pads being enclosed by the planes defined by said top wall, said bottom wall, said side walls, and said back wall. The back wall is shown in figures 4 and 5 at leadlines 67, 68. Smith discloses the claimed invention except for a connector interface at the front of said housing, said connector interface being adapted for receiving a connector of an electrical or optical conductor. Hall discloses a connector interface at the front of the housing, the connector interface being adapted for receiving a connector of an electrical or optical

Art Unit: 2839

conductor. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Smith to provide the connector interface at the front of the housing as taught by Hall so as to supply signal to the system. The references are applied for teaching of use of plug in type modules and these teaching can not limited by the specific uses disclosed in the references.

Regarding claim 27, Smith (see figures 9-11) discloses said pads are disposed on an edge of said module circuit board 66.

Regarding claim 28, Smith (see figures 9-11) said pads are adapted to mate with said mating connector through movement of the module to said mating connector along a plane parallel to the plane of said circuit board.

Regarding claim 29, Smith (see figures 9-11) discloses said back wall only partially covers the back of said module circuit board such that said edge portion is accessible from the back of the module along the plane of said module circuit board.

Regarding claims 30, 34-37, Smith (see figures 9-11) discloses the claimed invention except for grounding contacts configured for electrical connection to said housing of said receptacle upon insertion of said module in said receptacle. Hall discloses the grounding contacts configured for electrical connection to the housing of the receptacle upon insertion of the module in the receptacle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Smith to provide the grounding contacts configured for electrical connection to the housing of the receptacle upon insertion of the module in the receptacle as taught by Hall so as to supply signal to the system.

Regarding claim 31, Smith (see figures 9-11) discloses the claimed invention except for said grounding contacts are disposed at least on said top wall and said side walls. Hall discloses as discussed above.

3. Claims 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (U. S. Patent 4,352,492) in view of Hall (U. S. Patent 4,388,671) and further in view of Poplawski (U. S. Patent 5,734,558).

4. Regarding claims 38-43, Smith and Hall disclose the claimed invention except for cartridge for transceiver. Poplawski discloses the transceiver at 312. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Smith and hall the transceiver as taught by Poplawski because that would enable basic Smith type cartridge and connector to have wider use.

Allowable Subject Matter

5. Claims 32-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims..

None of the reference discloses an actuator slidably connected to said module and a latching member extending from said module for latching with a resilient latch of a receptacle, when said module is inserted into said receptacle, said resilient latch engages said latching member, and when said actuator is pushed backward, said

actuator urges said resilient latch from said latching member, thereby allowing said resilient member to unload and urge the module from the receptacle.

6. Claims 1-25 are allowed.

7. The following is an examiner's statement of reasons for allowance:

1. Claims 1 and 13, the limitation "said bottom wall having bottom opening to receive a receptacle connector" when taken with other limitations of the claim, defines the claim over the art of record. For claim 19, the limitation "a planar module circuit comprising at least an edge portion comprising pads suitable for forming an electrical connection with contact of the mating connector, said modular circuit board being enclosed by the plane of said top wall, said bottom wall, and said side walls, and wherein said back wall only partially covers the back of said module such that said edge portion is accessible from the back of the module along the plane of said module circuit board" when taken with other limitations of the claim, defines the claim over the art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant argues that there is no motivation to modify the cartridge of Smith to have a connector interface as disclosed in Hall since such a motivation would destroy the principle of operation of Smith. The Examiner respectfully disagrees. Smith is used

Art Unit: 2839

for general teaching of plug in electronic modules with printed circuit board not for the very specific video game environment disclosed Hall discloses that it known to use such electronic module with front wall connectors for auxiliary electrical devices. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify to apply the same to Smith could than be used in for video games but in a different manner. For example switch like that at 45 could be connected by to cartridge 26.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong KT Dinh whose telephone number is 571-272-2090. The examiner can normally be reached on 8 -5, 5 days a week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Phuong Dinh', with a stylized flourish at the end.

Phuong Dinh
December 08, 2004.